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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.         | CONFIRMATION NO.       |
|---|-------------|----------------------|-----------------------------|------------------------|
| 10/781,028  | 02/18/2004  | Yoshiharu Baba       | TS8069 (US)                 | 2833                   |
| Yukiko Iwata<br>Shell Oil Company<br>Legal - Intellectual Property<br>P.O. Box 2463<br>Houston, TX 77252-2463 |             |                      | EXAMINER<br>GOLOBY, JAMES C |                        |
|   |             |                      | ART UNIT<br>1797            | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>02/07/2008     | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/781,028

**Applicant(s)**

BABA ET AL.

**Examiner**

JAMES GOLOBOY

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/12/07 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 4-7, 8-13, 15-16, 19-22, 24-28, and 30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Amended claim 1 recites a lubricating oil composition containing a primary amine having a tertiary alkyl group. However, the application as originally filed (at page 6 lines 16-24 and page 13 line 13 through page 15 line 2 of the specification, for

example) only provides support for primary amines having a specific structure, which is recited in claim 2 and its dependent claims. There is no support for the broad class of all primary amines having a tertiary alkyl group.

***Claim Rejections - 35 USC § 103***

4. Claims 1-3, 7-9, 13-15, 19, 21-26, and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garwood in view of Richardson.

Garwood, in column 15 lines 1-25 (Table 2), discloses the properties of a lubricant basestock, which Garwood teaches in column 5 lines 24-28 may be derived from a Fischer-Tropsch product, as recited in Claim 7. The lubricant basestocks "1-1" and "3-1" have viscosity indices, kinematic viscosities, and densities falling within the ranges recited in Claims 1, 7, 13, 15, 19, 21-22, and 24-26 (density =  $(141.5 / (131.5 + \text{API Gravity}))$ ). In column 14 lines 1-7, Garwood further teaches that the additives such as antioxidants and extreme pressure agents, as recited in Claims 28 and 30, may be added to the lubricant basestocks to form lubricating compositions. Garwood does not disclose a tertiary alkyl-primary amine additive

Richardson, in column 10 lines 1-14, describes a tertiary alkyl-primary amine additive for a mineral oil-based lubricant composition. This tertiary amine meets the limitations of claim 1. Richardson teaches in column 10 line 5 that the additive preferably contains 8 to 22 carbon atoms, strongly overlapping the range recited in Claim 2. In column 10 lines 12-15, Richardson teaches several amines (tert-octylamine, tert-decylamine, tert-dodecylamine, etc.) where the number of carbon atoms falls within

the range recited in Claim 2. The use of the additive taught by Richardson in the composition of Garwood also satisfies Claims 8-9, 14, 23, and 29. In column 2 line 27, Richardson teaches that the amine additive (component A) is preferably used in an amount of 0.5 to 5% by weight of the lubricant composition, falling within the range recited in Claim 3. It is noted that these amines have densities of approximately 0.8 g/cm<sup>3</sup> and will not significantly affect the density of the composition when combined with the base oils of Garwood in the amount taught by Richardson.

It would have been obvious to one of ordinary skill in the art to include in the lubricant composition of Garwood a tertiary alkyl-primary amine, as taught by Richardson, due to its use as an anticorrosion agent and friction modifier.

5. Claim 1, 4-6, 13, 16-18, 20, 22, 25, and 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Chevron UCBO 7R in view of Richardson.

As described on the webpage, Chevron UCBO 7R is a base oil with a kinematic viscosity of 39 mm<sup>2</sup>/s, a viscosity index of 135, a density of 0.834 g/cm<sup>3</sup>, and a flash point of 239-240° C, falling within the ranges recited in Claims 1, 4, 13, 16, 22, 25, and 27. The URL of the webpage from the Internet Archive indicates that the website dates from 2001, qualifying it as prior art under 35 USC 102(b). Chevron UCBO 7R does not disclose a tertiary alkyl-primary amine additive.

The discussion of Richardson in paragraph 4 above is incorporated here by reference. The addition of the tertiary alkyl-primary amine additive of Richardson to the base oil of Chevron UCBO 7R meets the limitations of Claims 5, 6, 17-18, and 20.

It would have been obvious to one of ordinary skill in the art to include in the lubricant composition of Chevron UCBO 7R a tertiary alkyl-primary amine, as taught by Richardson, due to its use as an anticorrosion agent and friction modifier.

6. Claims 10-12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chevron UCBO 7R in view of Richardson as applied to claims 1, 4-6, 13, 16-18, 20, 22, 25, and 27 above, and further in view of O'Rear.

The discussion of Chevron UCBO 7R in view of Richardson in paragraph 5 above is incorporated here by reference. Chevron UCBO 7R and Richardson disclose a lubricating composition containing a Group III base oil and meeting the limitations of claims 4-6, but Chevron UCBO 7R does not disclose a Fischer-Tropsch process.

In column 7 lines 34-36, O'Rear teaches that Fischer-Tropsch wax, as in Claim 10, is an "ideal feed" for the production of Group III base oils. It would have been obvious to one of ordinary skill in the art to produce the Chevron UCBO 7R base oil from a Fischer-Tropsch product due to the above teaching of O'Rear.

### ***Response to Arguments***

7. Applicant argues that Garwood does not teach a lubricating composition with a density within the claimed range. Garwood teaches base oils with densities, viscosity indices, and kinematic viscosities within the claimed ranges. The tertiary amine additives of Richardson have densities of approximately  $0.8 \text{ g/cm}^3$ , and when added to the base oils of Garwood will not bring the density of the composition outside the

claimed range. Applicant asserts that lubricating compositions based on the oils of Garwood will have a density 10% higher than the claimed density, but does not provide support for this assertion.

Applicant further argues that Richardson is not properly combined with Garwood, because Richardson relates to compositions for extending seal life and are not related to solving the problem of energy conservation in hydraulic systems. It is noted that the amended claims do not contain any mention of hydraulic systems or oils. Garwood, Richardson, and the current application all deal with lubricating compositions. Richardson teaches that tertiary alkyl-primary amines are useful lubricant additives and one of ordinary skill in the art would have expected them to retain their functionality when added to a composition based on the base oil of Garwood.

Applicant has not addressed the rejections over Chevron UCBO 7R, and those rejections have therefore been maintained.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is (571)272-2476. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Glenn A Caldarola/  
Acting SPE of Art Unit 1797

JCG